

Claims

1. Power generator unit composed of a drive motor and a generator, particularly a diesel engine and a synchronous generator, with a stationary rotor winding (28) and permanent magnets (35) for excitation of the generator, where its rotor (29), as an external rotor, forms the flywheel of the diesel engine, and where its stator (11) carries the rotor winding (28) and is arranged within the rotor, characterized in that

the rotor (29) is built onto a fan wheel (2) that in turn is flanged onto the crankshaft (1) of the drive motor, at its face;

that the stator (11) is structured as a package of iron sheet metal, which bears the rotor winding (28) and is screwed on multiple times at the circumference of an inside ring (10) of a generator housing lid (9) provided at the outflow side, by means of stator screws (17) that are passed through bores in its sheet-metal package and secure the sheet-metal package together;

that the rotor (29) is structured as a package of iron sheet metal, which bears the permanent magnets (35) to generate a rotating magnetic field, and is screwed on multiple times at the circumference of the fan wheel (2), by means of clamping screws (30) that are passed through bores in its sheet-metal package and secure the sheet-metal package together.

2. Power generator unit according to Claim 1, characterized in that

the clamping screws (30) are screwed onto the fan wheel (2) within its ring part that carries the blades (4).

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3. Power generator unit according to Claim 1, characterized in that several attachment screws (7) that pass through the entire housing length, arranged distributed over the circumference, closely within the cylinder mantle of the generator housing (8), are provided, which are screwed onto a motor-side connection housing (5), on the one hand, and onto the generator housing lid (9), on the other hand.
4. Power generator unit according to Claim 3, characterized in that the generator housing (8) is made of sheet metal and secured in place between the connection housing (5) and the generator lid (9), with both faces, over a flat area.
5. Power generator unit according to Claim 1, characterized in that the stator screws (17) are inserted through spacer sleeves (20) between the stator sheet-metal package and the inside ring (10), and are secured between the inside ring (10) and the side of the stator (11) facing away from it.
6. Power generator unit according to Claim 1, characterized in that the clamping screws (30) are inserted through support sleeves (32) between the rotor sheet-metal package and the fan wheel (2), and are secured between the fan wheel (2) and the side of the rotor (29) facing away from it.

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